

A Checklist of Idaho Ants

(Hymenoptera: Formicidae)¹

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The ants of Idaho have been listed only once: Cole (1936) reported 3 subfamilies, 17 genera, 48 species and 25 subspecies or varieties for a total of 73 forms of ants (Hymenoptera: Formicidae) as occurring in Idaho.

The following checklist contains 4 subfamilies, 23 genera, and 115 species, with 7 subspecies and a hybrid for a total of 123 forms. A total of 21 species are listed for the first time from Idaho. These are: *Myrmica* sp. (near *discontinua*), *Pheidole pilifera pacifica*, *Leptothorax diversipilosus*, *Forelius foetidus*, *Brachymyrmex depilis*, *Camponotus essigi*, *C. semitestaceus*, *Acanthomyops coloradensis*, *Formica aerata*, *F. bradleyi*, *F. ciliata*, *F. laeviceps*, *F. lepida*, *F. sp. (near neoclara)*, *F. occulta*, *F. pacifica*, *F. opaciventris*, *F. rubicunda*, *F. tahoensis*, *F. ulkei* and *F. vinculans*. The differences in numbers of genera and species between Cole's list and the present one can be misleading. Many of the new names on our list are a result of nomenclatural changes in recent years.

Changes in nomenclature since 1936 have been extensive, particularly in the genera *Pogonomyrmex*, *Stenamma*, *Formica* (fusca group), *Myrmica*, *Acanthomyops*, *Lasius*, and *Myrmecocystus*. Further changes may be expected in the following genera: *Aphenogaster*, *Myrmica*, *Leptothorax*, *Camponotus* and *Formica* (especially in the *rufa* group).

The present list is based on both literature citations and collections. Knowlton (1970, 1975); Allred and Cole (1971); Horning and Barr (1970); and Cole (1934) have compiled lists of ants for Curlew Valley, Craters of the Moon National Monument, the National Reactor Testing Station (now called the Idaho Nuclear Engineering Laboratory) and the Snake River plains, respectively. New records not cited in the literature are based on voucher specimens housed at the University of Idaho, Moscow (UI), Boise State University, Boise (BSU), the

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George C. Wheeler Collection (GCW), the Museum of Comparative Zoology, Harvard University (MCZ), the California Academy of Sciences (CAS), and in the personal collections of the authors, William H. Clark (WHC), Nicholas P. Yensen (NPY), and André Francoeur (AF).

Subspecies are included mainly for future taxonomic efforts and related studies.

Literature citations have been listed whenever possible to help verify the record. When more than two literature citations exist for a species only two of the more recent are usually used. Caution should be observed in that some records may be taken from an earlier citation and may not necessarily denote two separate records.

The species are listed alphabetically within genera. It is hoped that this will aid the nonmyrmecologist in locating names. Some of the more recent synonyms and "uses" are included with the literature citation to help ameliorate the confusion caused by the recent nomenclatural changes.

This list is a first step towards a paper on Idaho ants containing distribution and ecological data, identification keys and illustrations.

List of the Species

SUBFAMILY PONERINAE

PONERA

1. *Ponera pennsylvanica* Buckley
Taylor, 1967: 32.

SUBFAMILY MYRMICINAE

MYRMICA

2. *americana* Weber
Knowlton, 1975. Smith, 1951:
790.
3. *brevispinosa* W. Wheeler
Creighton, 1950: 97. Weber,
1950.
4. *emeryana* Forel
Smith, 1951: 790. Weber, 1948,
as *M. schencki emeryana*.
Caution: This name is listed
here for reference purposes,
despite being completely mis-
leading for the moment.
5. *hamulata* Weber
Knowlton, 1975.
6. *incompleta* Provancher
Knowlton, 1975 and 1970, as *M.
brevinodis*. Francoeur and
Béique, 1966. Weber, 1950 and
Cole, 1936, as *M. brevinodissulci-
nodooides*.

7. *fracticornis* Emery

Allred and Cole, 1971, as *M.
lobicornis*. Horning and Barr,
1970.

8. *lobifrons* Pergande

Knowlton, 1975, as *M. lobicornis
lobifrons*. UI.

9. *monticola* W. Wheeler

Knowlton, 1975, 1970.

10. *spatulata* M. Smith

Knowlton, 1975.

11. *tahoensis* W. Wheeler

Knowlton, 1975.

12. sp. (near *discontinua* Weber)

AF. CAS.

MANICA

13. *hunteri* (W. Wheeler)

Wheeler and Wheeler, 1970.
Creighton, 1950: 108, as *M.
aldrichi*.

14. *mutica* (Emery)

Knowlton, 1975. Wheeler and
Wheeler, 1970.

POGONOMYRMEX

15. *occidentalis* (Cresson)

Knowlton, 1975. Cole, 1968: 96.

16. *owyhee* Cole
Knowlton, 1975. Cole, 1968: 103.
17. *salinus* Olsen
Knowlton, 1975, 1970.

STENAMMA

18. *diecki* Emery
Snelling, 1973.
19. *occidentale* M. Smith
Snelling, 1973.
20. *smithi* Cole
Knowlton, 1975, as *S. knowltoni*.
Snelling, 1973.

APHAENOGASTER

21. *occidentalis* (Emery)
Knowlton, 1975. Horning and
Barr, 1970, as *A. subterranea*
valida.
22. *unita* W. Wheeler
Creighton, 1950: 154. Cole, 1936.

VEROMESSOR

23. *lobognathus* (Andrews)
Allred and Cole, 1971.

PHEDOLE

24. *californica* Mayr
Cole, 1936, 1934.
24a. *californica oregonica* Emery
Creighton, 1950: 173. Cole,
1936 as *P. oregonica*
25. *pilifera pacifica* W. Wheeler
WHC.

CREMATOGASTER

26. *mormonum* Emery
Smith, 1958: 127, and Smith
1951: 809, as *C. lineolata cerasi*.

MONOMORIUM

27. *minimum* (Buckley)
Knowlton, 1975. Allred and
Cole, 1971.
28. *pharaonis* (Linnaeus)
Cole, 1934.

SOLENOPSIS

29. *molesta* (Say)
Knowlton, 1975. Cole, 1934.
29a. *molesta validiuscula* Emery
Knowlton, 1975. Horning and
Barr, 1970.

LEPTOTHORAX

30. *andrei* Emery
Allred and Cole, 1971.
31. *diversipilosus* M. Smith
WHC.

32. *hirticornis* Emery
Cole, 1936, as *L. hirticornis formidolosa*.
33. *muscorum* (Nylander)
Knowlton, 1975, 1970.
34. *nevadensis* W. Wheeler
Knowlton, 1975, 1970.
34a. *nevadensis eldoradensis*
W. Wheeler
Horning and Barr, 1970. Smith,
1951: 817, as *L. eldoradensis*.
34b. *nevadensis melanderi* W. Wheeler
Creighton, 1950: 266. Smith,
1951: 818, as *L. melanderi*.
35. *nitens* Emery
Knowlton, 1975, 1970.
36. *rugatulus* Emery
Knowlton, 1975. Horning and
Barr, 1970.
37. *tricarinatus* Emery
Smith, 1967: 359.

SUBFAMILY DOLICHODERINAE**IRIDOMYRMEX**

38. *pruinosum* (Roger)
Wheeler and Wheeler, 1973: 102.
Cole, 1936.
38a. *pruinosum analis* (E. Andre)
Smith, 1967: 364. Creighton,
1950: 343.

FORELIUS

39. *foetidus* (Buckley)
UI. NPY.

CONOMYRMA

40. *insana* (Buckley)
Knowlton, 1970, as *Dorymyrmex*
pyramicus. Creighton, 1950: 349,
as *D. pyramicus*.

TAPINOMA

41. *sessile* (Say)
Knowlton, 1975. Allred and Cole,
1971.

SUBFAMILY FORMICINAE**BRACHYMYRMEX**

42. *depilis* Emery
UI.

CAMPONOTUS

43. *essigi* M. Smith
UI.
44. *herculeanus* (Linnaeus)
Cole, 1936, as *C. herculeanus*
whymperi.

45. *laevigatus* (F. Smith)
Horning and Barr, 1970. Cole,
1936.
46. *modoc* W. Wheeler
Horning and Barr, 1970, as *C.
pennsylvanicus modoc*. Cole,
1936, as *C. herculeanus* var.
modoc.
47. *nearcticus* Emery
Cole, 1936, as *C. fallax nearcti-
cus*.
48. *noveboracensis* (Fitch)
Cole, 1936, as *C. herculeanus
ligniperdus* var. *noveboracensis*.
49. *semitestaceus* Emery
WHC.
50. *vicinus* Mayr
Knowlton, 1975. Allred and
Cole, 1971.
51. sp. (near *hyatti* Emery)
Cole, 1936, 1934.

LASIUS

52. *alienus* (Foerster)
Knowlton, 1975, 1970, as *L.
alienus americanus*.
53. *crypticus* Wilson
Allred and Cole, 1971. Wilson,
1955: 105.
54. *fallax* Wilson
Wilson, 1955: 133.
55. *flavus* (Fabricius)
Wilson 1955: 126. Cole, 1936, as
L. brevicornis.
56. *neoniger* Emery
Wilson, 1955: 101. Cole, 1936, as
L. niger var. *neoniger*.
57. *niger* (Linnaeus)
Knowlton, 1975. Horning and
Barr, 1970.
58. *pallitarsis* (Provancher)
Francoeur and Béique, 1966.
Wilson, 1955: 41, as *L. sitkaen-
sis*.
59. *subumbratus* Viereck
Wilson, 1955: 178.
60. *umbratus* (Nylander)
Wilson, 1955: 161.
61. *vestitus* W. Wheeler
Wilson, 1955: 175. Cole, 1936, as
L. umbratus vestitus.

ACANTHOMYOPS Mayr

62. *coloradensis* (W. Wheeler)
NPY.
63. *interjectus* (Mayr)
Wing, 1968: 95.

64. *latipes* (Walsh)³
Wing, 1968: 101. Cole, 1936, as
Lasius latipes.
65. *murphyi* (Forel)³
Wing, 1968: 115.

MYRMECOCYSTUS

66. *hammettensis* Cole
Snelling, 1976: 102. Creighton,
1950: 443.
67. *kennedyi* Cole
Snelling, 1976: 65. Creighton,
1950: 449, as *M. semirufus*.
68. *pyramicus* M. Smith
Snelling, 1976: 135. WHC. NPY.
69. *testaceus* Emery
Snelling, 1976: 138. Allred and
Cole, 1971, as *M. mojave*.

FORMICA

70. *accreta* Francoeur
Francoeur, 1973: 188.
71. *aerata* Francoeur
UI. BSU.
72. *altipetens* W. Wheeler
Francoeur, 1973: 58. Creighton,
1950: 531.
73. *argentea* W. Wheeler
Knowlton, 1975, as *F. fusca*.
Francoeur, 1973: 150.
74. *bradleyi* W. Wheeler
UI.
75. *canadensis* Santschi
Francoeur, 1973: 66. Smith,
1951: 861, as *F. cinerea* var.
canadensis.
76. *ciliata* Mayr
BSU.
77. *coloradensis* W. Wheeler
Horning and Barr, 1970, as *F.
integroides coloradensis*. Creigh-
ton, 1950: 489, as *F. integroides
coloradensis*.
78. *criniventris* W. Wheeler
Knowlton, 1975, 1970.
79. *curiosa* Creighton
Snelling, 1969. Cole, 1946, as *F.
parcipappa*.
80. *dakotensis* Emery
Cole, 1936, as *F. dakotensis* var.
montigena.
81. *densiventris* Viereck
Horning and Barr, 1970, as *F.
rasilis*. Knowlton, 1970.

³Also *murphyi* x *latipes* hybrid (Wing, 1968: 117).

82. *haemorrhoidalis* Emery
Knowlton, 1975. Allred and Cole,
1971.
83. *hewitti* W. Wheeler
Francoeur, 1973: 213. Horning
and Barr, 1970.
84. *laeviceps* Creighton
WHC.
85. *lasiooides* Emery
Knowlton, 1975. Allred and Cole,
1971.
86. *levida* W. Wheeler
AF, G. C. and J. N. Wheeler col-
lection, and MCZ. This third
record for the species is a large
extension of range toward the
north.
87. *limata* W. Wheeler
Knowlton, 1975, 1970.
88. *manni* W. Wheeler
Knowlton, 1975. Allred and Cole,
1971.
89. *neoclara* Emery
Knowlton, 1975. Francoeur,
1973: 91.
90. sp. (near *neoclara*) This sibling
form looks like *F. neoclara* but
without the metasternal proces-
ses, with a more angulate pro-
podeum and dorsal margin of
petiole usually entire. Collections:
AF, BSU, GCW, UI, WHC.
91. *neogagates* Emery
Knowlton, 1975. Allred and Cole,
1971.
92. *neorufibarbis* Emery
Knowlton, 1975. Francoeur,
1973: 225.
93. *obscuripes* Forel
Knowlton, 1975. Allred and Cole,
1971.
94. *obscuriventris clivia* Creighton
Clark and Yensen, 1976.
95. *obtusopilosa* Emery
Knowlton, 1975. Allred and
Cole, 1971.
96. *occulta* Francoeur
UI.
97. *opaciventris* Emery
AF. MCZ.
98. *oreas* W. Wheeler
Knowlton, 1975. Allred and Cole,
1971.
- 98a. *oreas comptula* W. Wheeler
Knowlton, 1975, 1970.
99. *pacifica* Francoeur
BSU.
100. *pallidefulva nitidiventris* Emery
Cole, 1936, as *F. pallidefulva*
schaufussi var. *incerta*.
101. *planipilis* Creighton
Knowlton, 1975. Horning and
Barr, 1970.
102. *podzolica* Francoeur
Francoeur, 1973: 169.
103. *puberula* Emery
Cole, 1936, 1934 as *F. sanguinea*
puberula.
104. *querquetulana* Kennedy and Dennis
Knowlton, 1975.
105. *rubicunda* Emery
UI.
106. *subnitens* Creighton
Knowlton, 1975, 1970.
107. *subaenescens* Emery
Francoeur, 1973: 200, as *F. fusca*
(forme *subaenescens*). UI.
108. *subnuda* Emery
Chapman, 1957.
109. *subpolita* Mayr
Knowlton, 1975, as *F. subpolita*
camponoticeps. Francoeur, 1973:
131.
110. *tahoensis* W. Wheeler
BSU. UI.
111. *transmontanis* Francoeur
Francoeur, 1973: 140.
112. *ulkei* Emery
AF. MCZ.
113. *vinculans* W. Wheeler
UI.
114. *whymperi* Forel
Knowlton, 1975. Allred and Cole,
1971.
- 114a. *whymperi alpina* W. Wheeler
Horning and Barr, 1970.
- 114b. *whymperi californica* W. Wheeler
Creighton, 1950: 510.
- POLYERGUS**
115. *breviceps* Emery
Horning and Barr, 1970, as *P.*
rufescens breviceps. Wheeler,
1968.

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BOOK REVIEW

Insects and the Life of Man Wigglesworth, Vincent B. \$12.50
217 pp., cloth, Halsted Press Book, John Wiley & Sons, Inc.

Here is an informative and interesting analysis of the numerous ways in which an awareness of insect physiology increases man's ability to understand (and cope with) insects. Dr. Wigglesworth's qualifications as an insect physiologist are legion, and this book indicates the breadth of his training and background.

In order to acquaint the reader with the historical background of insect physiology, Professor Wigglesworth has selected a few of the outstanding lectures and essays prepared and presented by him over a span of nearly forty years. They have been reprinted here, unaltered, but with appropriate footnotes added to update some of his original statements.